

## Abstract

A food quality indicator device an indicator compound provided on a substrate. The indicator compound changes color due to the presence of volatile compounds, such as volatile bases, in spoiled food, even when the food is frozen. Alternatively, the indicator compound detects the presence of an unwanted amine-producing biological agent, such as bacteria or fungi. The indicator compound is typically contained within a polymeric matrix disposed on the substrate. Examples of suitable indicator compounds include halogenated azo dyes, sulfonated xanthene dyes, and sulfonated hydroxy-functional triphenylmethane dyes.

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